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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17, 18 and 22-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The originally fined specification failed to teach the recited use of 2.5 to 4 wt.% of polysalicylate yielding less than or equal to 20 mol% uncapped hydroxyl end groups for poly(arylene ether) (PPE). PP [0014] of the published US 2005/0080185 A1 shows the less than or equal to 20 mol% and table 2 shows 2.5, 3 and 4 wt.% as well as 6 wt.% of polysalicylate, but said combined limitation does not have support. Said table 2 does not show any mol% of uncapped hydroxyl end groups and the specification does not teach any direct relationship between the recited limitations. Thus, it would be new matter.

Claims 17, 18 and 22-33 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for using a high amount of PPE such as 95 wt.% taught in claim 32, does not reasonably provide enablement for the recited PPE without any amount in claim 17 and only 50 wt% PPE in claim 32. The specification does not enable any person skilled in the art to which it pertains, or with which it is most

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nearly connected, to make the invention commensurate in scope with these claims.

Applicant points out that example 2 of White et al (US 4,760,118) shows 71% capping (and thus 29 % uncapped hydroxyl end groups when polystyrene is present during the capping reaction and states that capping efficiency drops in the presence of another component such as polystyrene. However, applicant failed to see/mention that said example 2 uses an equal amount (50wt.% each) of polystyrene and PPE. The instant claim 17 does not recite any amount of PPE and of the recited component. Thus, the presence of 50 wt.% of the recited impact modifier would meet the claims 17 and 32, and the instant claim 29 further recites 1-80 wt.% of additional polystyrene. The instant examples 10 and 16 show the presence of other polymers up to 59 wt.%. But, the presence of the at least 50 wt.% of polystyrene which is similar to the example 10 would not yield the recited PPE with less than or equal to 20 mol% uncapped hydroxyl end groups which is taught by White et al as pointed out by applicant. Thus, undue experimentation would be needed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17, 18 and 22-33 are rejected under 35 U.S.C. 103(a) as obvious over White et al (US 4,760,118) in view of Geprags et al (US 2003/0130403 A1), Adedeji et al (US 6,872,777) and/or Jalbert et al (US 4,654,405).

Rejection is maintained for reason of record with following response.

Applicant asserts that example 2 of White et al shows 71% capping with the use of 4 wt.% of polysalicylate and states that capping efficiency drops in the presence of another component such as polystyrene.

However, White et al teach utilizing various amounts of polystyrene such as 5-95% or 25-75% at col. 7, lines 59-61 and examples 1 and 4 show capping of more than 80 mol%. Also, example 2 shows capping of more than 80 mol% with 6 and 8 wt.% of polysalicylate. Thus, for example, the use of 5 wt.% of polystyrene with 4 wt.% of polysalicylate in example 2 would yield the recited capping of more than 80 mol%. Or, one skilled in the art would know that the capping efficiency with 4 wt.% of polysalicylate in example 2 would be increased by decreasing the amount of polystyrene.

Thus, for example, the use of 5 wt.% of polystyrene with 4 wt.% of polysalicylate in example 2 with a small amount of additional component(s) taught by the secondary reference(s) which would meet the recited less than or equal to 20 mol% uncapped hydroxyl end groups for poly(arylene ether) would be obvious.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAE H. YOON whose telephone number is (571)272-1128. The examiner can normally be reached on Mon-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TAE H YOON/
Primary Examiner
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THY/October 20, 2011